

Title (en)

BLOCKCHAIN-BASED SYSTEM, AND ELECTRONIC APPARATUS AND METHOD IN THE SYSTEM

Title (de)

BLOCKKETTENBASIERTES SYSTEM SOWIE ELEKTRONISCHE VORRICHTUNG UND VERFAHREN IN DEM SYSTEM

Title (fr)

SYSTÈME À BASE DE CHAÎNE DE BLOCS ET APPAREIL ÉLECTRONIQUE ET PROCÉDÉ DANS LE SYSTÈME

Publication

**EP 3249599 A1 20171129 (EN)**

Application

**EP 17165051 A 20170405**

Priority

CN 201610364591 A 20160527

Abstract (en)

There is disclosed a blockchain-based system, and an electronic apparatus and a method in the system. The electronic apparatus at a control node end includes a processor configured to: verify, in response to an ownership declaration for a new object that is first introduced from a to-be-verified node in the system, the ownership declaration; and sign, in a case that the verification is successful, the ownership declaration to be returned to the to-be-verified node, so that the signed ownership declaration is verified by other nodes in the system and a record regarding the ownership declaration is added to the blockchain. According to the embodiment of the disclosure, it is possible to verify the newly introduced object in the blockchain-based system without binding with a cipher coin, while maintaining a peer-to-peer architecture of the blockchain-based system.

IPC 8 full level

**G06Q 30/06** (2012.01); **H04L 9/32** (2006.01)

CPC (source: CN EP US)

**G06F 16/951** (2018.12 - EP US); **G06Q 30/0601** (2013.01 - EP US); **H04L 9/3218** (2013.01 - EP US); **H04L 9/3221** (2013.01 - CN); **H04L 9/3239** (2013.01 - EP US); **H04L 9/3247** (2013.01 - CN EP US); **H04L 9/50** (2022.05 - EP); **H04L 63/0428** (2013.01 - US); **H04L 63/123** (2013.01 - US); **H04L 67/10** (2013.01 - US); **H04L 9/50** (2022.05 - US); **H04L 2209/56** (2013.01 - EP US)

Citation (search report)

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- [A] ANONYMOUS: "Blockchain (database) - Wikipedia", 21 December 2015 (2015-12-21), XP055340108, Retrieved from the Internet <URL:https://en.wikipedia.org/w/index.php?title=Blockchain\_(database)&oldid=696261810> [retrieved on 20170130] & ANONYMOUS: "Zero-knowledge proof - Wikipedia", 21 May 2016 (2016-05-21), XP055384206, Retrieved from the Internet <URL:https://en.wikipedia.org/w/index.php?title=Zero-knowledge\_proof&oldid=721412897> [retrieved on 20170622]

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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 3249599 A1 20171129**; CN 107438002 A 20171205; CN 107438002 B 20220211; EP 3764308 A1 20210113; US 10505949 B2 20191210; US 11329995 B2 20220510; US 2017346833 A1 20171130; US 2020084223 A1 20200312

DOCDB simple family (application)

**EP 17165051 A 20170405**; CN 201610364591 A 20160527; EP 20194525 A 20170405; US 201715450126 A 20170306; US 201916681582 A 20191112